

## APERTURE MASKS FOR CIRCUIT FABRICATION

### ABSTRACT

In various embodiments, the invention is directed to aperture mask deposition  
5 techniques for use in creating integrated circuits or integrated circuit elements. In other  
embodiments, the invention is directed to different apparatuses that facilitate the  
deposition techniques. The techniques generally involve sequentially depositing material  
through a number of aperture masks formed with patterns that define layers or portions of  
various layers of a circuit. In this manner, circuits can be created using aperture mask  
10 deposition techniques, without requiring any etching or photolithography, which is  
particularly useful when organic semiconductors are involved. The techniques can be  
useful in creating circuit elements for electronic displays, low-cost integrated circuits such  
as radio frequency identification (RFID) circuits, and other circuits.